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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	
Inquiry Concerning Deployment of	)	
Advanced Telecommunications Capability	)	
to all Americans in a Reasonable and Timely	)	CC Docket No. 98-146
Fashion, and Possible Steps to Accelerate	)	
Such Deployment Pursuant to Section 706 of	)	
the Telecommunications Act of 1996	)	

To: The Commission

COMMENTS OF METRICOM, INC.

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March 20, 2000

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SUMMARY

Metricom, Inc., believes that while significant advances have been made to reasonably and timely deploy advanced telecommunications capability to all Americans, more FCC action is necessary to accelerate this deployment. First, the Commission must recognize the distinction between wireless (including fixed and mobile technology) and wireline transmission speeds in defining advanced telecommunications capability. A lower transmission rate is more appropriate for mobile wireless capability. Second, the Commission must remove barriers to entry for Internet service providers by creating regulatory symmetry and parity in regulations governing nondiscriminatory access to rights-of-way, infrastructure and facilities. Finally, the Commission must allocate additional spectrum for unlicensed wireless uses that does not have rigorous technical and operational rules that tend to impede rather than spur innovative and efficient use of the spectrum. Once the Commission takes these crucial steps, more advanced telecommunications capability will be reasonably and timely available to all Americans.

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To: The Commission

COMMENTS OF METRICOM, INC.

Metricom, Inc. ("Metricom"), by its attorneys, hereby submits these Comments in response to the Commission's Notice of Inquiry ("NOI") under Section 706 of the Telecommunications Act of 1996.[1] In this proceeding, the Commission asks four basic questions:

- What is advanced telecommunications capability?
- Is advanced telecommunications capability being deployed to all Americans?
- Is overall deployment reasonable and timely?
- If not, what actions will accelerate deployment?

As a facilities-based wireless Internet service provider ("ISP"), Metricom is providing the next generation of high-speed, mobile, Internet access service through wireless technology. In the following Comments, Metricom addresses these questions as they relate to its experience in

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1. In the Matter of Inquiry Concerning Deployment of Advanced Telecommunications Capability to all Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to section 706 of the Telecommunications Act of 1996, *Notice of Inquiry*, FCC 00-57, released February 18, 2000.

deploying a mobile wireless Internet access service. As discussed below, a major concern to Metricom is the Commission's definition of advanced telecommunications capability ("ATC") under Section 706 which includes only a single data transmission rate for wireline (i.e., direct physical communications), fixed point-to-point wireless, and mobile wireless services. Metricom strongly believes that this "one size fits all" approach fails to comply with the intent of Congress to speed the deployment of advanced services to all Americans. Metricom believes that while some advances are being made to deploy ATC to all Americans, the FCC should do more to encourage the deployment of ATC, especially wireless ATC, on a reasonable and timely basis.

Specifically, Metricom urges the Commission to: (1) distinguish among wireline, fixed point-to-point wireless, and mobile wireless capabilities, and at a minimum, provide a lower data transmission rate for wireless services to be considered ATC; (2) adopt regulations for facilities-based ISPs ensuring equal and nondiscriminatory access to infrastructure and facilities; and (3) allocate additional spectrum for unlicensed wireless use. The current federal and state regulatory schemes have hindered the ability to fully deploy advanced wireless Internet access services, thereby denying ATC to a large number of Americans. Moreover, the lack of sufficient spectrum for unlicensed uses has curtailed the ability to fully deploy advanced mobile wireless Internet access services. As a result, Metricom has a keen interest in this proceeding, and appreciates this opportunity to respond to the Commission's NOI.

I. BACKGROUND

Metricom is a young, rapidly growing, wireless communications company based in Silicon Valley. Metricom has pioneered the development of state-of-the-art, spread spectrum, wireless data communications systems. Metricom has used these technologies to implement its commercially

available Ricochet[2] Internet access service. This service operates using two unlicensed and one licensed frequency bands, and is considered the fastest, most easily deployable, and least expensive campus and metropolitan area wireless data network available today. Ricochet currently serves approximately 30,000 subscribers.

The Ricochet wireless network is based on a microcellular "mesh" architecture. The subscriber communicates with the Ricochet network through a small transceiver that can be easily attached to a portable computer. The subscriber unit, which has been approved by the Federal Communications Commission ("FCC") for operation without a license pursuant to Part 15 of the FCC's rules,[3] performs the function of a modem, and transmits the subscriber's data using packet-switched, frequency-hopping spread spectrum technology. The subscriber unit communicates with a nearby transceiver that is most often mounted on a street light pole (a "poletop" unit). The poletop unit can receive transmissions from subscriber modems located within approximately a half-mile radius. Communications proceed from poletop to poletop until they reach a wired access point ("WAP"). These WAPs, typically located on building rooftops, are the points at which the wireless communications are transferred to a wired frame relay network. Once they have entered the wired network, communications may be transferred to an Internet gateway, a corporate intranet, an ordinary telephone modem, or even to another subscriber on the Ricochet network via additional radio frequency transmissions. Communications originating from one of these sources and traveling back to a Ricochet subscriber proceed simultaneously in the reverse direction: from the wired network, through a WAP, then over the wireless network from pole-top to pole-top, and finally to the

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2. Ricochet is a registered trademark of Metricom.

3. 47 C.F.R. §§ 15.1 *et seq.*

subscriber modem. Each subscriber modem continuously monitors the network to find its "best node" -- the poletop from which it receives the strongest signal and least delay. The system is able to configure itself "on-the-fly" to handle such conditions as mobile subscribers, busy or out-of-service pole-top nodes, and interference from external sources.

II. ARGUMENT

A. The Definition of Advanced Telecommunications Capability Must Distinguish Wireless Capability from Wireline Capability

The Commission asks in its Notice whether its current definition of ATC remains valid.[4] Currently, the Commission defines ATC as having the capability of supporting, in both upstream and downstream directions, a data transmission rate in excess of 200 kbps in the last mile.[5] While appealing in its simplicity, this definition is inadequate to address the variety of advanced telecommunications technologies being deployed today. In particular, if the Commission wants to stimulate competition and speed deployment of ATC to all Americans as directed by Section 706, it must apply different data transmission rate definitions for wireless and wireline delivery systems.

These differing definitions are necessary so that the Commission does not unfairly favor wireline technologies over wireless, radio frequency ("RF") technologies. There are fundamental differences between wireline and wireless transmissions. In a wireline environment, the entire frequency spectrum is available for signal transmissions, and interference from external sources is minimal. In a wireless environment, the available transmission spectrum is limited to those frequencies allocated, and those with favorable propagation characteristics. In addition, in a

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4. Notice at 5-6, ¶ 8.

5. Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, *Report*, 14 FCC Rcd 2398, 2406 (1999).

wireless environment, users transmitting on the same frequency in the same area can interfere with each other and make the frequencies unusable. Because transmission rates depend, in part, upon available bandwidth, these differences mean that, other things being equal, greater transmission rates can be achieved over wires than over-the-air. In addition, it must be noted that greater bandwidths are available for fixed point-to-point wireless services than are available for mobile services. Accordingly, it is more difficult to achieve greater transmission rates using mobile wireless services.

Computer technology may provide a useful analogy. The speed at which a computer's central processing unit (CPU) operates is one measure of how "advanced" a computer is. However, CPU speed is not the only factor in consumers' decisions over which computer technology is most advanced. Indeed, laptop computers, which generally operate at lower CPU speeds than equivalent desktop computers, would enjoy no sales at all if CPU speed was the only factor that consumers used in making purchasing decisions. If the Commission held that only computers with CPU speeds above a certain threshold were "advanced," then it is possible that no laptop computers at all would meet that criterion. Obviously, this situation would short-change the large segment of computer users that consider laptop computers to be more "advanced," and even essential, for their purposes.

Likewise, by using a single transmission rate to determine what constitutes ATC, the Commission effectively ignores other aspects of telecommunications that consumers may consider "advanced." While it is true that one measure of "advanced" is how fast a page of text appears on a computer user's screen, that factor alone does not drive all consumer decisions about technology. Wireline technologies have one fundamental limitation - - they require a physical connection between the user and the Internet (or other data service). Wireless technologies eliminate this physical connection and permit users to access the Internet wherever it may be convenient for them

to do so, even while moving from place to place. For this reason, a consumer may consider a wireless Internet access service more desirable than a wireline Internet access service even if it operates at a slower data rate, just as many consumers consider a laptop computer to be more desirable than a desktop computer even though it may be slower and more expensive.

Accordingly, for the purposes of Section 706, the Commission should distinguish between not only wireline capability and wireless capability, but also between fixed point-to-point and mobile wireless technologies, and at a minimum, should require a lower transmission rate speed for wireless services to be considered ATC. Metricom's next-generation Ricochet2, which provides always-on full Internet access at an overall transmission rate of 128 kbps, operates at the cutting edge of wireless technology and is certainly "advanced" under any technological measure.[6]

B. Advanced Telecommunications Capability is Not Being Deployed to all Americans on a Reasonable and Timely Basis, and the Commission Must Take Immediate Action Consistent with Section 706.

In the Notice, the Commission asks whether ATC is being deployed to all Americans, and whether overall deployment is reasonable and timely.[7] Metricom believes that important advances in telecommunications capability, such as wireless Internet access, have not been deployed to all Americans on and timely and reasonable basis for two primary reasons: (1) lack of regulations for facilities-based ISPs ensuring equal and nondiscriminatory access to infrastructure and facilities; and, (2) lack of sufficient spectrum allocation for wireless unlicensed use. Not only is Metricom

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6. Recent "wired access protocol" technology can provide only a limited or translated version of Internet access because the technology must be designed to fit on small handheld devices. The Ricochet system, on the other hand, provides full Internet access for mobile users employing laptop computers.

7. Notice at 5.

competitively disadvantaged by the painstakingly slow deployment of its wireless Internet access service (see discussion below), but American consumers are left without a significant competitive choice in how they access the Internet. This undermines the goal of Section 706, and the Commission must act now to eliminate these barriers and promote competition in the telecommunications market.

Section 706 arms the Commission with a number of ways in which to encourage telecommunications deployment, remove barriers to infrastructure investment, and promote competition in the telecommunications market. The tool most appealing and relevant to Metricom is the Commission's authority to use "other regulating methods that remove barriers to infrastructure investment."[8] Removing barriers to infrastructure investment is the obstacle that Metricom has not been able to overcome since the inception of its pioneering business plan, and FCC intervention is necessary and requested.

1. The Commission's Regulations Should Provide Uniform Equal and Nondiscriminatory Access to Infrastructure and Facilities for ISPs

As a facilities-based ISP which makes extensive use of street light poles and rights-of-way for its radio frequency devices, Metricom has encountered a significant lack of uniformity in the regulation of access between federal and state jurisdictions. This non-uniformity has severely hindered Metricom from fully deploying its wireless Internet access facilities. Metricom has documented instances of these problems in comments previously filed with the FCC, a copy of which is attached hereto. Thus far, the FCC has not acted to ameliorate these problems, and Metricom's ability to deploy infrastructure has suffered. Since this has had an adverse impact on

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8. *See* 47 U.S.C. § 157(a) (1996).

the public's ability to gain more choice in how it accesses the Internet, the deployment of ATC has also suffered.

In recent legislation, Congress has attempted to eliminate barriers to competition in communications services. For example:

- Section 224 of the Communications Act gives telecommunications service providers and cable television operators nondiscriminatory access to utility companies' poles, ducts, conduits, and rights-of-way.[9] The purpose of Section 224 is "to ensure that the deployment of communications networks and the development of competition are not impeded by private ownership and control of the scarce infrastructure and rights-of-way that many communications providers must use in order to reach customers."[10]
- Section 253(a) of the Communications Act preempts state and local regulation that would have the effect of prohibiting the provision of telecommunications service.[11] The purpose of Section 253(a) is to ensure that state and local regulations do not serve as barriers to entry into the telecommunications market.[12]

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9. 47 U.S.C. § 224 (1996).

10. Implementation of Section 703(e) of the Telecommunications Act of 1996; Amendment of the Commission's Rules and Policies Governing Pole Attachments, *Report and Order*, 13 FCC Rcd 6777, 6780 (1999).

11. 47 U.S.C. § 253(a) (1996).

12. *Cablevision of Boston, Inc. v. Public Improvement Commission of the City of Boston*, 184 F.3d 88 (1st Cir. 1999).

- Section 332(c)(7) of the Communications Act limits the authority of state and local governments over decisions regarding the placement, construction and modification of facilities of "personal wireless services."[13] The purpose of Section 332(c)(7) is to ensure that a state or local government does not unreasonably favor one competitor over another in the deployment of facilities.[14]

A common feature of these legislative enactments is that they all focus specifically on removing barriers to competition in the market for *telecommunications service*. However, ISPs do not provide telecommunications service. Instead, they provide an information service. This distinction has created a lack of regulatory parity between those who deploy telecommunications facilities for the purpose of offering a transmission service (*i.e.*, telecommunications carriers) and those, such as Metricom, who deploy telecommunications facilities for the purpose of offering an information service.

Not only is this lack of regulatory parity patently unfair, there is strong evidence that it is completely unintentional. As quoted above, the purpose of these legislative enactments is to promote the deployment of communications networks (Section 224), remove barriers to entry in the telecommunications market (Section 253(a)), and avoid favoring one competitor over another (Section 332(c)(7)). Metricom is deploying communications networks, is in the telecommunications market, and is a competitor to some of the same companies, such as local exchange service

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13. 47 U.S.C. § 332(c)(7) (1996). "Personal wireless services" includes commercial mobile radio services such as cellular and PCS service as well as other wireless telecommunications services. 47 U.S.C. § 332(c)(7)(C).

14. H. Conf. Rep. No. 104-458, 104th Cong., 2d Sess. 208, *reprinted in* 1996 U.S.C.C.A.N. 10, 222.

providers, who are favored under these statutes. Yet Metricom, because it uses its telecommunications facilities to provide Internet access service, faces barriers to entry that do not affect other telecommunications providers.[15]

Accordingly, the Commission should take steps to ensure that its regulations regarding access to buildings, poles, and rights-of-way apply to the deployment of *all* telecommunications facilities, regardless of whether those facilities are used in the provision of telecommunications services or information services. Specifically, the Commission should:

- Promulgate new regulations that give information service providers nondiscriminatory access to utility poles, conduits and rights-of-way;[16]
- Preempt state and local regulations that have the effect of prohibiting the provision of information services; and
- Include wireless information services within the term "personal wireless services" as used in Section 332(c)(7) of the Communications Act, thereby limiting the authority of state and local governments over decisions regarding the placement, construction and modification of facilities for the provision of wireless information services.

The Commission has the authority under Sections 257(a) and 4(i) of the Communications Act in addition to Section 706, to implement the relief recommended herein.[17] Section 257(a) requires the Commission to complete a proceeding for the purpose of identifying and *eliminating*, by regulations pursuant to authority under the Act, market entry barriers for entrepreneuers and other small businesses in the provision and ownership of telecommunications services and *information*

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15. *See* Attachment for examples of such barriers.

16. These access rights should be similar to those given to telecommunications providers and cable television operators under Section 224 of the Communications Act.

17. See, 47 U.S.C. §§ 4(i) and 257(a).

services, or in the provision of parts or services to providers of telecommunications services and *information services*.[18] The Commission is required to act in order to eliminate barriers to entry. Such effort is the only way the Commission can encourage the deployment of ATC to all Americans.

2. The Commission Should Set Aside Additional Spectrum for Unlicensed Use.

In its spectrum allotment decisions, the FCC is virtually always focused on licensed uses to the exclusion of unlicensed uses. However, Metricom strongly advocates devoting additional spectrum allocations to unlicensed uses. Metricom's own deployment of Ricochet illustrates the advantages that can accrue from unlicensed operation: robust transmission protocols; rapid and widespread deployment; low start-up costs; efficient spectrum use; and continued incentives to develop better systems. These factors contribute to the availability of innovative, low-cost services to the public and efficient spectrum use.

The lack of sufficient unlicensed spectrum is a technical impediment to Metricom's deployment of a high-bandwidth wireless Internet access service, and to the deployment of other innovative services, and therefore affects the deployment of ATC to all Americans. The Commission should ensure that sufficient spectrum is allocated for unlicensed uses that foster innovation and growth of the Internet industry and deployment of ATC to all Americans.

To ensure that any new unlicensed spectrum allocation will contribute to the deployment of ATC, unlicensed spectrum should not be encumbered with strict etiquettes or complex technical specifications regarding the spectrum use. Such detailed and complex regulations, while well-

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18. 47 U.S.C. § 257(a) (1996) (emphasis added).

intentioned, tend to impede rather than spur the growth and innovation of services and uses.[19] Instead, whenever spectrum is allocated for unlicensed uses, simple technical rules should be developed, such as those governing the 902-928 MHZ unlicensed band,[20] leaving the marketplace to determine what operational requirements, if any, are necessary. This approach supports innovation and growth in the design of Internet access services, and promotes the overall objective of Section 706 -- creating an incentive for the timely and reasonable deployment of ATC.

III. CONCLUSION

As the Administration has noted, the rapid growth of the Internet and its increasing use throughout the world for electronic commerce holds great promise for American consumers and for the Nation.[21] Wireless facilities-based ISPs stand ready to help fulfill this hope for American consumers. To enable them to do so, the Commission should distinguish between wireline and wireless capability, and at a minimum, should require a lower transmission data rate for a mobile, wireless service to be considered an ATC, and wireless ISPs must be given equal and nondiscriminatory access to facilities, infrastructures and rights-of-way to continue offering ATC to all Americans. Additionally, more spectrum should be reserved for unlicensed uses.

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19. For example, when creating regulations for the allocation and use of unlicensed Personal Communications Service, the FCC imposed onerous technical and operational requirements on the use of this spectrum. *See, e.g.*, Amendment of the Commission's Rules to Establish New Personal Communications Services, *Second Report and Order*, 8 FCC Rcd 7700 (1993); *Id., Memorandum Op. and Order*, 9 FCC Rcd 4957 (1994). As a result, this spectrum is underutilized today.

20. *See* 47 C.F.R. § 15.247

21. *See* 65 Fed. Reg. 4801 (Dept. of Commerce, February 1, 2000).

Achievements in these areas will promote the deployment of ATC to all Americans on a reasonable and timely basis.

WHEREFORE, Metricom requests that the Commission find that wireless Internet access is not being deployed to all Americans on a reasonable and timely basis, and requests that the Commission take immediate action pursuant to Section 706 to accelerate deployment of ATC and to promote competition in the telecommunications market.

Respectfully submitted,

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March 20, 2000

Its ATTORNEYS

ATTACHMENT

Comments of Metricom in FCC WT Docket No. 99-217, October 14, 1999

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Promotion of Competitive Networks	)	
in Local Telecommunications Markets	)	WT Docket No. 99-217
	)	

COMMENTS OF METRICOM, INC.

Metricom, Inc. ("Metricom"), by its attorneys, pursuant to the invitation extended in the Commission's Notice of Inquiry ("NOI") in the above-referenced proceeding, hereby submits these Comments in response to questions raised by the Commission relating to certain actions that are intended to facilitate the development of competitive telecommunications networks.[1] Specifically, the Commission has solicited information concerning access to rights-of-way. Metricom is well-qualified to respond as it has extensive experience in this area.

Metricom applauds the Commission's NOI as it is timely and critical to the development of a competitive telecommunications infrastructure. In its Comments filed in the companion Notice of Proposed Rule Making ("NPRM") in this proceeding, Metricom highlighted a narrow but extremely important issue that was indirectly raised by the NPRM. Specifically, Metricom sought to ensure that those who deploy telecommunications networks for the provision of information

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1. *Notice of Proposed Rule Making and Notice of Inquiry,* WT Docket No. 99-217, FCC 99-141 (Rel. July 7, 1999). The time for filing Comments in response to the NOI was extended to October 12, 1999, *Order Extending Pleading Cycle*, DA 99-1563 (Rel. Aug. 6, 1999).

services to the public benefit from the same rights of access and nondiscriminatory treatment as do those who provide telecommunications services or cable television services. Only in this way can one of the primary goals of the 1996 Act be achieved -- the timely deployment of advanced telecommunications capability to all Americans.[2] Obviously, as discussed below, such action would greatly facilitate Metricom's access to rights-of-way.

BACKGROUND

Metricom is a young, rapidly growing, wireless telecommunications company based in Silicon Valley. With encouragement from the Commission, Metricom has pioneered the development of state-of-the-art, spread spectrum, wireless data communications systems. Metricom has used these technologies to implement its commercially available Ricochet[3] wireless Internet access service, considered to be the fastest, most easily deployable, and least expensive campus and metropolitan area wireless data network available today. Ricochet currently serves approximately 30,000 subscribers.

Metricom's "next generation" Ricochet network will operate at a gross over-the-air transmission rate of up to 1 Mbps, and provide user data rates of up to 128 kbps. Metricom plans to roll-out the new service in the Summer of 2000 in the following cities: Atlanta, Baltimore, Chicago, Dallas, Houston, Los Angeles, Phoenix, San Diego, San Jose, Seattle, New York and Washington, D.C.

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2. *See* Section 706(a) of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

3. Ricochet is a registered trademark of Metricom.

Ricochet's wireless network is based on a microcellular "mesh" architecture. This mesh consists mainly of "pole-top" units, shoe-box sized transceivers most often mounted on streetlight standards or electric utility poles typically located within the public right-of-way. These pole-top units transmit at a maximum output power of 1 watt.

One of the biggest challenges in deploying the Metricom network is obtaining authority to access public rights-of-way. This process is extremely difficult because each jurisdiction, regardless of its size, must be contacted and dealt with individually. Metricom has finally received approximately 600 authorizations for the use of public rights-of-way since 1995, and is presently working on over 700 more. During the next two phases of deployment, Metricom will need to consummate an additional 1,300 transactions authorizing the use of public rights-of-way. Metricom's general experience is that it needs to employ approximately 1 field person for every 20 right-of-way transactions (plus administrative, management and legal staff), that it averages approximately five to six months to obtain right-of-way authority, and that some right-of-way authority may take years to resolve, or never be resolved at all.

GENERAL BARRIERS

Metricom is in the vanguard of wireless facilities service providers in its needs, desire, and ability to use existing facilities located in public rights-of-way. The extensive use of streetlight standards and electric utility poles typically located in the public right-of-way are generally regulated and managed by municipalities or counties. These jurisdictions usually have a process whereby use of the public right-of-way is approved by a city council or similar regulatory body. However, because Metricom's use of the right-of-way is atypical -- deployment of small, low power, radios

on a limited number of poles with no construction required[4] -- there often exists no established process to follow. Accordingly, in many cases, Metricom finds itself assisting municipalities in developing processes to deal with the deployment of a system like Ricochet.

Metricom's requests to use light standards and electric utility poles located in the public right-of-way are generally met with:

(1) a lack of understanding as to the approval process necessary for Metricom's use of the right-of-way;

(2) zoning ordinances or permitting processes (*e.g.,* special use permits) that inordinately and unfairly regulate, impede or deny Metricom's use of the public right-of-way; and,

(3) failure of the jurisdiction to timely process Metricom's request.

It has been Metricom's experience that in many instances education serves as the best tool to acquaint municipalities, counties and electric utilities about the needs and benefits of deployment of Ricochet in any geographic area. To this end, Metricom has expended considerable time, energy and money to produce and distribute educational materials detailing the Ricochet operating characteristics, system requirements, and health and safety information. In addition, Metricom's staff in these locations make themselves available in public and private sessions to explain the Ricochet network and its operating characteristics, address any health and safety concerns, and provide other relevant information required by administrative staff. This process has been arduous, time consuming, and expensive as local jurisdictions differ in many respects regarding timing, approval processes, permitting requirements, and administrative fee structures.

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4. The typical Metricom streetlight installation involves no construction and takes approximately ten minutes.

Despite the variance in processes across jurisdictions, this approach has been sufficient in many jurisdictions to facilitate processing of Metricom's application for use of public rights-of-way usually with reasonable promptness. Metricom believes it has developed one of the most successful track records in consummating agreements to use the public right-of-way. Nevertheless, despite Metricom's experience, professional approach, and the degree to which it is held in high regard by jurisdictions with which it has completed right-of-way agreements, a large number of jurisdictions have imposed unreasonable barriers to entry delaying Metricom's deployment of Ricochet service. A discussion of general barriers is set forth below.

A. MUNICIPAL BARRIERS. The first general category of barriers to entry which Metricom has experienced are those presented by the municipalities themselves. In many cases, Metricom encounters zoning ordinances that unfairly regulate or impede Metricom's use of the public right-of-way. Some of these ordinances simply prohibit entirely the deployment of wireless facilities within the public right-of-way, or within certain portions of the public right-of-way where Metricom must deploy. In other situations, Metricom faces unreasonable permit and fee requirements. In some instances, there is no documented permit or fee structure; in other instances, existing permit/fee structures present a "one size fits all" that is really not applicable to Metricom's reduced use of the right-of-way.

The most egregious barriers exist in several municipalities where there is an outright refusal to even consider Metricom's proposal, frequently without explanation, and frequently offering feeble excuses such as: "we don't have time to deal with this; we don't see a need for your type of technology; I've never received a letter from a constituent wondering when wireless Internet

services would be available in my town; if we let you in, we'll have to let everyone else in." Finally, in a number of cases, Metricom has been told that in order to deploy its network, it must comply with an ordinance which, on its face, does not apply to Metricom. This creates substantial confusion as to Metricom's regulatory status under federal law, and the ability of the state or municipality to regulate Ricochet service.

B. PUBLIC UTILITY COMPANY BARRIERS. The second general category of deployment barriers experienced by Metricom is difficulty in negotiating use agreements with public utility companies that own street lights and power distribution poles that are located in the public right-of-way. It is Metricom's belief that some of these obstacles may be due, at least in part, to the fact that such enterprises have affiliated companies that offer services that are competitive with Metricom's Ricochet service. Such obstacles include outright refusals to negotiate with Metricom, refusals to negotiate unless and until Metricom becomes certificated with the state public utility commission (which Metricom believes is unnecessary because it is an information service provider), refusals to negotiate due to unsubstantiated concerns that the Ricochet network would interfere with existing technologies, and refusals to negotiate in good faith by requesting exorbitant rental fees.[5]

C. CONFLICTING STATE REGULATORY REQUIREMENTS. The third general category of barriers experienced by Metricom involves conflicting state regulatory requirements. In many states, the only processes for state certification for Ricochet are framed in the context of some form of a telecommunications carrier (cellular, CMRS, LEC, etc.) -- a category into which Metricom

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5. Metricom, as an information service provider, has no recourse to Section 224 of the Communications Act for relief. *See* Comments of Metricom filed in the companion NPRM in this proceeding.

does not fit because it is an information services provider. In many cases, if Metricom were some form of telecommunications carrier, it would be excused from many cumbersome, protracted and expensive regulatory filings. This appears to be antithetical to the Commission's regulatory plan where information services providers should be subject to less regulatory burden.

Admittedly, many states have adopted regulations intended to simplify the process for obtaining authority to use rights-of-way. However, these regulations typically apply to "telecommunications carriers," a regulatory category into which Metricom does not fit.

CONCLUSION

It is hoped that the foregoing general discussion of Metricom's experiences with respect to access to rights-of-way will assist the Commission in working with state and local governments to ensure that entities like Metricom have full and fair access to public rights-of-way in order to be able to provide full and fair competition in the provision of telecommunications to the public.

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